PRODUCT INFORMATION PACKET

Model No: 810023.00
Catalog No: 810023.00
Encoder Motors, TEBC - Axial, 50 HP, 3 Ph, 60 Hz, 230/460 V, 1765 RPM, 326TC Frame

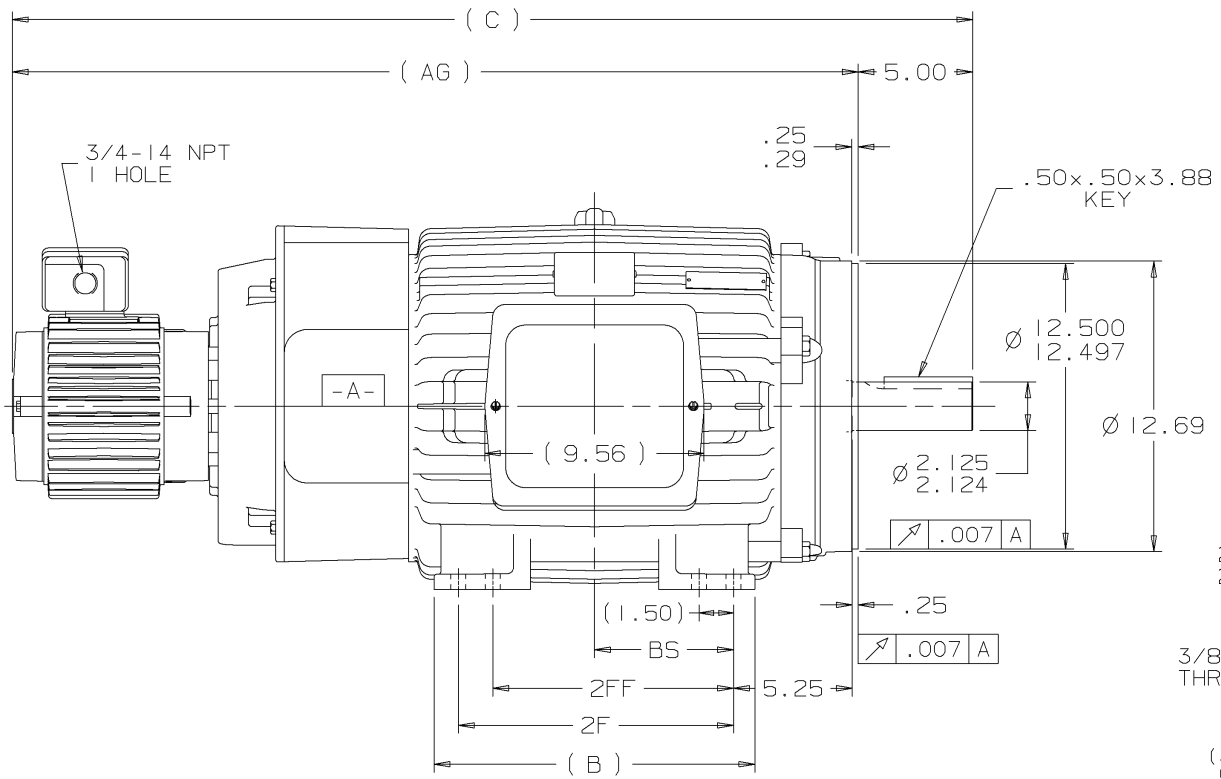
Nameplate Specifications

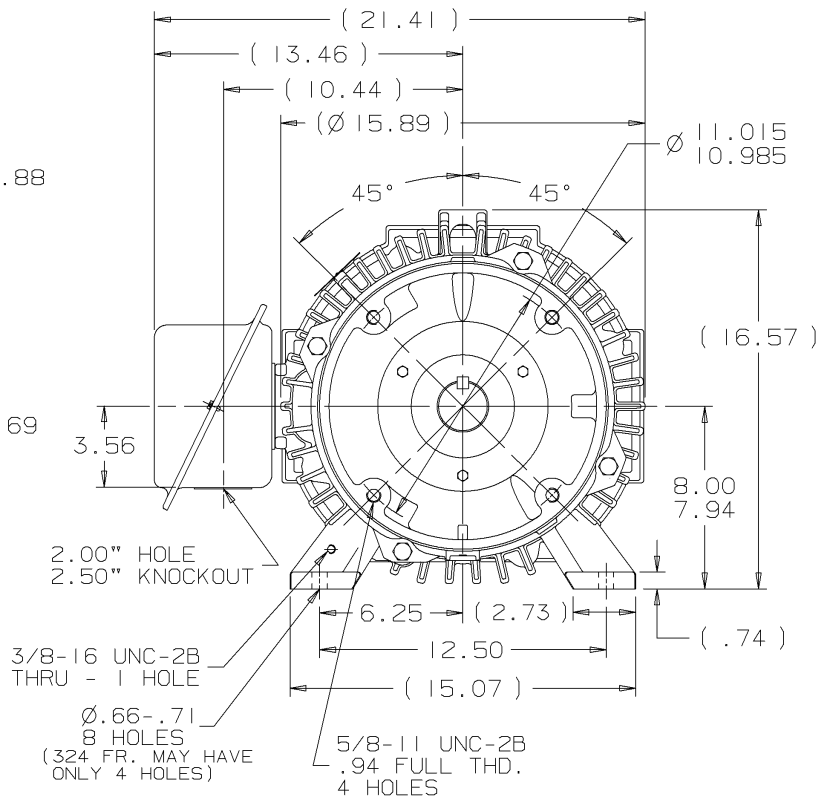
Output HP	50 Hp	Output KW	37.0 kW
Frequency	60 Hz	Voltage	230/460 V
Current	120.0/60.0 A	Speed	1765 rpm
Service Factor	1	Phase	3
Efficiency	93 %	Power Factor	83.5
Duty	Continuous	Insulation Class	H
Design Code	INV	KVA Code	J
Frame	326TC	Enclosure	Totally Enclosed Blower cooled - Axial
Thermal Protection	No Protection	Ambient Temperature	40 °C
Drive End Bearing Size	6312	Opp Drive End Bearing Size	6311
UL	Recognized	CSA	Y
CE	Y	IP Code	43
Number of Speeds	1		

Technical Specifications

Electrical Type	Squirrel Cage Inverter Duty	Starting Method	Inverter Only
Poles	4	Rotation	Reversible
Resistance Main	.126 Ohms	Mounting	Rigid Base
Motor Orientation	Horizontal	Drive End Bearing	Ball
Opp Drive End Bearing	Ball	Frame Material	Cast Iron
Shaft Type	T	Overall Length	41.91 in
Frame Length	16.25 in	Shaft Diameter	2.125 in
Shaft Extension	5.25 in	Assembly/Box Mounting	F1/F2 CAPABLE
Inverter Load	CONSTANT 2000:1		
Connection Drawing	A-EE7308T-LE	Outline Drawing	B-SS311268LE-1625

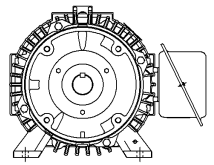
B-SS311268LE





NOTES:
1. C.BOX CAN BE ROTATED IN 90° STEPS
2. C.BOX CAN BE MOUNTED ON OPPOSITE SIDE BY REMOVING BRACKETS AND TURNING FRAME 180°
3. NAMEPLATES TO BE READ FROM CONDUIT BOX SIDE OF MOTOR

F2 VIEW



DASH	FRAME	B	C	2F	2FF	BS	AG
1475	324T	14.00	40.41	10.50		5.25	35.41
1625	326T	14.00	41.91	12.00	10.50	6.00	36.91

NO.	REVISION	BY	DATE	CHK
1	NEW DRAWING CN 35134	NJS	05-20-2002	TB

TOLERANCES UNLESS SPECIFIED

DEC.	TOLERANCE
.X	±.1
.XX	±.03
.XXX	±.005
.XXXX	±.0005
ANG	± 7'30"

SURFACE ROUGHNESS UNLESS SPECIFIED

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE OUTLINE - TEFC
320 FR. - BB - STD - 12.50 LAM - C'FACE

MAT'L.
FINISH
CAD FILE SS311268LE
PURCHASED
DIST WA - LB - WP - LM - BR - BY

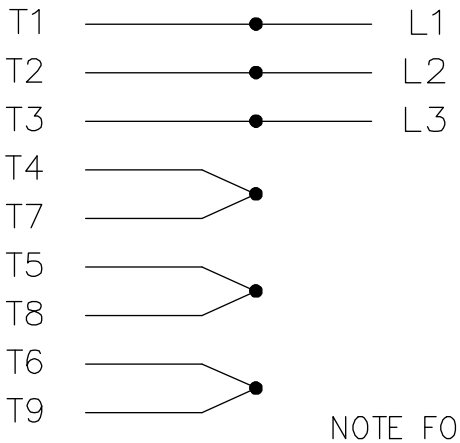
DRAWN NJS 05-16-2002
CHK ML 05-20-2002
APPD TB 05-20-2002
SCALE
REF
FMF
PREV

SIZE B | DRAWING NO. SS311268LE | REV. 1

EE7308T-LE

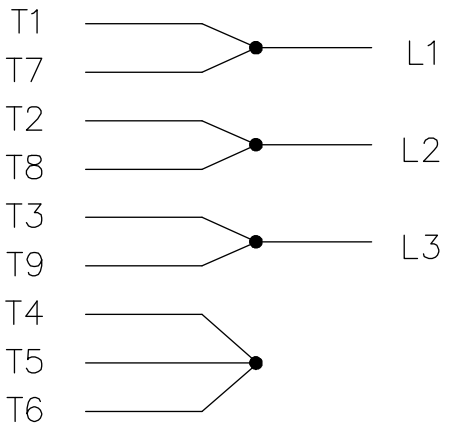
THREE PHASE
DUAL VOLTAGE MOTOR

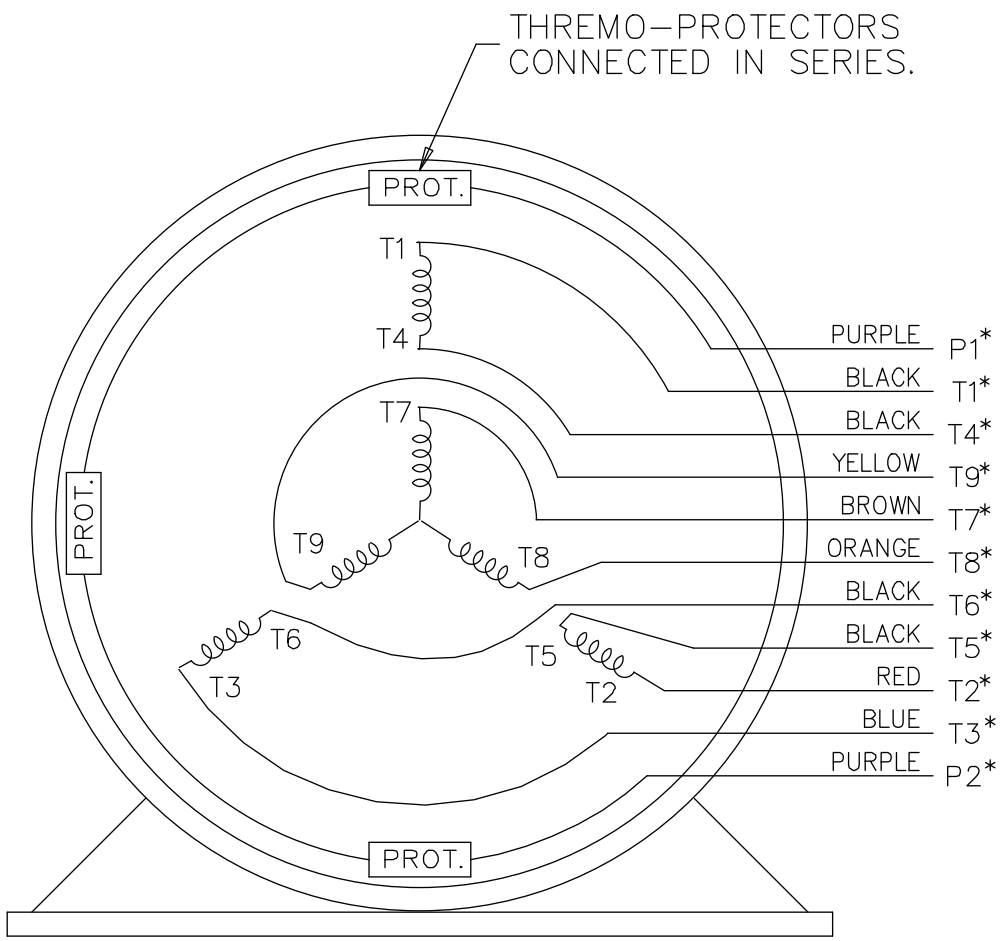
HIGH VOLTAGE



NOTE FOR FACTORY USE ONLY:
TO SURGE TEST FOR COMMON CONNECT:
HIGH VOLT: CONNECT P1 TO T1
THEN P2 TO L1
LOW VOLT: CONNECT P1 TO T1 & T7,
THEN P2 TO L1

LOW VOLTAGE





VIEW OF TERMINAL END

* USE LEADS AS PER PLANT STANDARD IRRWSPECTIVE OF THEIR COLOUR.

NO.	REVISION	BY & DATE	CHK
05	ADDED * NOTE PER ECN # 26921	UD 01-30-2013	JD
04	ADDED COLORS TO "T & P" LEADS CN 40494	MSG 08-08-2006	ML
03	RE-ISSUE	NJS 04-21-2004	JET
02	REDRAWN	TAT 04-20-2004	ML
01	NEW DRAWING CN 34708	TJB 05-08-2002	ML

TOLERANCES UNLESS SPECIFIED

DEC.	INCHES
.X	±.1
.XX	±.02
.XXX	±.005
.XXXX	±.0005
ANG	±7'30"

LEESON ELECTRIC MOTORS GEARMOTORS AND DRIVES

TITLE CONNECTION DIAGRAM
3 PHASE – DUAL VOLTAGE MOTOR

MAT'L.

FINISH

RFP

CAD FILE EE7308T_LE

DIST LB-WP-LE

DRAWN	TJB	05-07-2002
CHK	ML	05-08-2002
APPD	TB	05-08-2002
SCALE		1=1
REF		
FMF		
PREV		

SIZE	DRAWING NO. PAGE OF	REV.
A	EE7308T-LE	05

P.O. BOX 8003
WAUSAU, WI 54401-8003
PH. 715-675-3311

DATA VOLTS: 460

CERTIFICATION DATA SHEET

CONN. DIAGRAM: A-EE7308T-LE **CAT #:** 810023.00
OUTLINE: B-SS311268LE-1625
WINDING: K2864187 NONE 3

TYPICAL MOTOR PERFORMANCE DATA

HP	KW	SYNC RPM	FL RPM	FRAME	ENCLOSURE	TYPE	KVA CODE	DESIGN
50	37	1800	1765	326TC	TEBC	TBP	J	INF

PH	HZ	VOLTS	AMPS	START TYPE	DUTY	INSL	S.F.	AMB	ELEV.
3	60	230/460	120/60	INVERTER ONLY	CONT	H	1.15	40	3300

F.L. EFF	93.0	3/4 LD EFF	93.6	1/2 LD EFF	93.0	GTD EFF	ELECT. TYPE
F.L. PF	83.5	3/4 LD PF	78.5	1/2 LD PF	68.0	91.7	SQ CAGE INV DUTY

F.L. TORQUE	LR AMPS @ 460 V	L.R. TORQUE	B.D. TORQUE	F.L. RISE (°C)
149 LB-FT	440	270 LB-FT 181%	525 LB-FT 352%	65

PRESSURE @ 3	POWER	ROTOR WK²	MAX. LOAD WK²	SAFE STALL TIME	STARTS/HOUR	MOTOR WGT
75 dBA	84 dBA	5.4 LB-FT²	0 LB-FT²	0 SEC.	0	650 LB.

*** SUPPLEMENTAL INFORMATION ***

DE BRACKET TYPE	ODE BRACKET TYPE	MOUNT TYPE	MOTOR ORIENTATION	SEVERE DUTY	HAZARDOUS LOCATION	DRIP COVER	SCREENS	PAINT
C-FACE	ENCODER	RIGID	HORIZONTAL	NO	NONE	NO	NONE	JE - LEESON (ENAM

BEARINGS DE	BEARINGS ODE	GREASE	SHAFT TYPE	SPECIAL DE	SPECIAL ODE	SHAFT MATERIAL	FRAME MATERIAL
BALL 6312	BALL 6311	POLYREX EM	T	NONE	NONE	1045 HOT ROLLED (C-204)	CAST IRON

THERMOSTATS	PROTECTORS	WDG RTD's	BRG RTD's	THERMISTORS	CONTROL	SPACE HEATERS
TSTATS (N/C)	NOT	NONE	NONE	NONE	FALSE	NA

R1 (ohms/ph)	R2 (ohms/ph)	X1 (ohms/ph)	X2 (ohms/ph)	Xm (ohms/ph)	VIBRATION (in/sec)	FLOAT
0.087	0.092	0.437	0.358	9.662	0.150	ODE

NOTES

INVERTER TORQUE: CONSTANT 2000:1
INV. HP SPEED RANGE: 1.5 X BASE SPEED

ENCODER: NORTHSTAR
ST56
NONE NONE **PPR**

BRAKE: NONE
NONE NONE
FT-LB: NA
VOLTAGE: NONE **HZ:**
UL: Y-(LEESON UL REC)

DATE: 1/17/2018

Data Sheet

Date: 1/17/2018

810023.00

LEESON

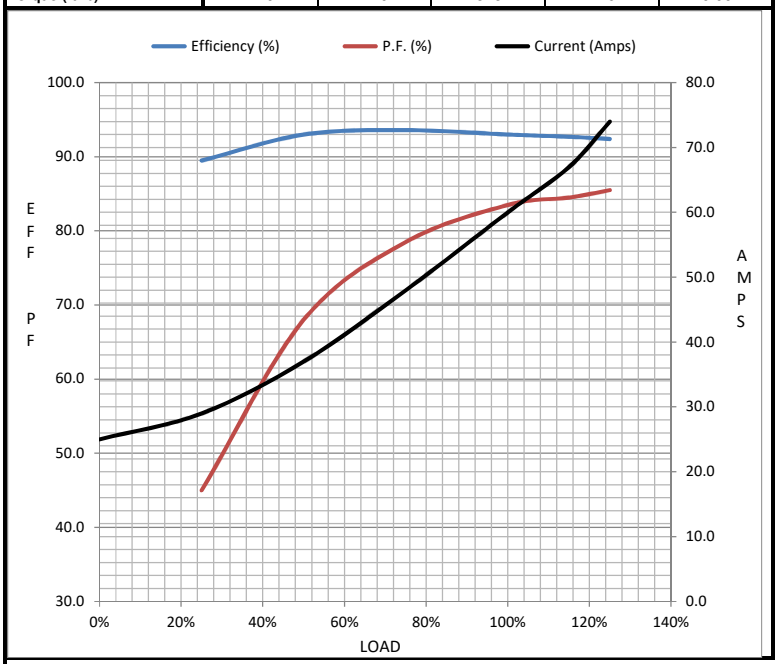
Data @ 460 V

Motor Load Data

Load	0%	25%	50%	75%	100%	115%	125%	LR	
Current (Amps)	25.0	29.0	37.0	48.0	60.0	67.0	74.0	440	
Torque (ft-lb)	0.00	36.5	74.0	111	149	168	187	270	
RPM	1800	1790	1785	1775	1765	1,759	1750	0	
Efficiency (%)		89.5	93.0	93.6	93.0	92.7	92.4		
P.F. (%)	0.0	45.0	68.0	78.5	83.5	84.5	85.5	33.0	

Motor Speed Data

	LR	Pull-Up	BD	Rated	Idle
Speed (RPM)	0	900	1650	1765	1800
Current (Amps)	440	400	300	60.0	25.0
Torque (ft-lb)	270	240	525	149	0.00



Information Block

HP	50.0	
Sync. RPM	1800	
Frame	326	
Enclosure	TEBC	
Construction	TBP	
Voltage	230/460	V
Frequency	60	Hz
Design	A	
LR Code letter	J	
Service Factor	1.15	
Temp Rise @ FL	65	° C
Duty	CONT	
Ambient	40	° C
Elevation	1,000	feet
Rotor/Shaft wk²	5.4	Lb-Ft²
Ref Wdg	K2864187 NONE	
Sound Pressure @ 1M	75	dBA
VFD Rating	CONSTANT 2000:1	
Outline Dwg	B-SS311268LE-1625	
Conn. Diag	A-EE7308T-LE	

Additional Specifications:

0

0

EQUIV CKT (OHMS / PHASE)

R1	R2	X1	X2	Xm
0.0870	0.0920	0.4370	0.3580	9.6620

Speed -Torque Curve